MARINE FISHERIES INITIATIVE PROGRAM (MARFIN) FY 2007
FEDERAL FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

Federal Agency: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

Funding Opportunity: Subject to the availability of funds, NMFS (hereafter referred to as "we" or "us") announces the availability of Federal assistance to award cooperative agreements under the Marine Fisheries Initiative (MARFIN), for research and development projects in the Gulf of Mexico and off the U.S. South Atlantic Coastal States. This announcement provides guideline, evaluation criteria, and selection procedures for the program.

Announcement Type: Initial Announcement

Catalog of Federal Domestic Assistance Number: 11.433 Marine Fisheries Initiative.

Dates: We must receive your application by 5 p.m. Eastern Daylight Time on July 12, 2006. Applications received after that time will not be considered for funding.

Contact Information: Scot Plank, State/Federal Liaison Branch
263 13th Avenue South
St. Petersburg, FL 33701
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Funding Opportunity Description: The MARFIN program provides financial assistance for research and development projects that optimize the use of fisheries in the Gulf of Mexico and off the South Atlantic states of North Carolina, South Carolina, Georgia, and Florida involving the U.S. fishing industry (recreational and commercial), including fishery biology, resource assessment, socioeconomic assessment, management and conservation, selected harvesting methods, and fish handling and processing.

Full Text of Announcement

I. Funding Opportunity Description

MARFIN is a competitive Federal assistance program that funds projects seeking to optimize research and development benefits from U.S. marine fishery resources through cooperative efforts involving the best research and management talents to accomplish priority activities. Projects funded under MARFIN provide answers for fishery needs covered by the NMFS Strategic Plan, available from the Southeast Regional Office (see Contact), particularly those goals relating to: rebuilding over-fished marine fisheries, maintaining currently productive fisheries, and integrating conservation of protected species and fisheries management. Funding priorities for MARFIN are formulated from recommendations received from non-Federal scientific and technical experts and from NMFS research and operations officials.

With the long term planning capabilities available through the Southeast Data Assessment and Review (SEDAR) process, the priorities are selected to coordinate assessment needs with this solicitation. Priority is given to funding projects in the subject areas listed in this section, but proposals in other areas are considered on a funds-available basis. There is no preference between short-term and long-term projects.

You are encouraged to address one of the priority areas listed below as they pertain to Federally managed species or species relevant to Federal fisheries management. If you select more than one priority, you should list first on your application the priority that most closely reflects the objectives of your proposal. Projects should focus on the greatest probability of recovering, maintaining, improving, or developing fisheries; improving the understanding of factors affecting recruitment success; and/or generating increased values and recreational opportunities for fisheries.

A. Bycatch

The bycatch of biological organisms (including interactions with sea turtles and marine mammals) by various fishing gears can have wide-reaching impacts from a fishery's management and an ecological standpoint, with the following major concerns:

1. Shrimp trawl fisheries. Studies are needed to contribute to the regional shrimp trawl bycatch program being conducted by NMFS in cooperation with state fisheries management agencies, commercial and recreational fishing organizations and interests, environmental organizations, universities, Councils, and Commissions. Specific guidance and research requirements are contained in the Cooperative Bycatch Plan for the Southeast, available from NMFS (see Contact). In particular, the studies should address:

    a. Data collection and analyses to expand and update current bycatch estimates, temporally and spatially emphasizing areas of greatest impact by shrimping. Sampling effort should include estimates of numbers, weight, and random samples of size (age) structure of associated bycatch complex. The statistical design and extent of the shrimp-trawl observation program should ensure that the bycatch data collected are appropriate and sufficient for stock assessment of the bycatch species, specifically red snapper.

b. Identification, development, and evaluation of gear, non-gear, and tactical fishing options to reduce bycatch.

c. Obtaining better estimates of fishing effort in the shrimp fishery, which might be done through vessel monitoring systems, electronic logbooks, or otherwise.

2. Reef fish fisheries. The reef fish complex is exploited by a variety of fishing gear and tactics. The following research on bycatch of reef fish species is needed:

a. Characterization and assessment of the impact of bycatch of regulatory discards in the commercial and recreational fishery including depth related release mortality for species caught with hook and line, bottom longline, bandit gear, and traps/fish pots.

b. Characterize the species composition, age, size, sex, and disposition (e.g. discard mortality rates) of all fishes caught by commercial and recreational fishermen with respect to depth and latitude as well as estimate effort. Species of interest include: South Atlantic and Gulf of Mexico gag, greater amberjack, hogfish, and vermilion snapper; south Atlantic white grunt, black sea bass, red porgy, tilefish, and snowy grouper; Gulf of Mexico red grouper, red snapper, and gray triggerfish; and Caribbean yellowfin grouper, yellowedge grouper, tilefish, mutton snapper, and yellowtail snapper.

c. Identify gear and tactics that can be used to return regulatory discards to depth in the recreational fishery to minimize or reverse pressure-related fishing trauma.

d. Develop on-board recording systems that will capture information on discarded fishes in the commercial and recreational fishery including species, length, depth, location, and disposition (float, swim, etc.).

B. Reef Fish and other Fishery Resources Associated with Reef Environments

Some species within the reef fish complex are overfished and/or experiencing overfishing, either because of directed efforts or because of being the bycatch of other fisheries. Reef fish are vulnerable to overfishing because they tend to concentrate over specific types of habitat, are often long-lived, may aggregate to spawn, and sometimes change sex. This behavior can make traditional fishery statistics misleading. Priority research areas include:

1. Collection of basic biological data for species in commercially and recreationally important fisheries. Life history studies are needed that cover the complete geographic range of species scheduled for assessments. In addition, data are also needed on less dominant stocks not scheduled for assessments, and Caribbean species.

a. Age and growth of reef fish:

(1) Description of the age and growth patterns, especially for South Atlantic and Gulf of Mexico gag, greater amberjack, hogfish, and vermilion snapper;

South Atlantic white grunt, black sea bass, red porgy, tilefish, and snowy grouper; Gulf of Mexico red grouper, red snapper, and gray triggerfish; and Caribbean yellowfin grouper, yellowedge grouper, tilefish, mutton snapper, and yellowtail snapper that are scheduled for stock assessments. Black grouper, scamp, red hind, speckled hind, coney, graysby, Warsaw grouper, silk snapper, queen snapper, other less dominant stocks, and management units for which data are lacking in the Caribbean require more age information. Better methods and standardized techniques are needed for aging yellowedge grouper, tilefish, snowy grouper, blueline tilefish, and other deep water species.

(2) Collect otoliths from groupers, snappers, and other reef fish species according to the Gulf States Marine Fisheries Commission (GSMFC) otolith manual. If proposal is selected for funding, coordinate studies and design sampling systems to provide production-style aging programs for the reef fish fishery with Steve VanderKooy at GSMFC (228) 875-5912. Analyze age information (by gear and sector) considering temporal and geographic effects for red grouper.

(3) Age sampling from commercial, headboat, and Marine Recreational Fisheries Statistic Survey (MRFSS) that is representative of the fisheries for South Atlantic and Gulf of Mexico gag, greater amberjack, hogfish, and vermilion snapper; South Atlantic white grunt, black sea bass, red porgy, tilefish, and snowy grouper; Gulf of Mexico red grouper, red snapper, and gray triggerfish; and Caribbean yellowfin grouper, yellowedge grouper, tilefish, mutton snapper, and yellowtail snapper.

b. Reproduction studies of reef fish:

Update maturity schedules, fecundity, and sex ratios throughout geographic range for species scheduled for stock assessments including: South Atlantic and Gulf of Mexico gag, greater amberjack, hogfish, and vermilion snapper; South Atlantic white grunt, black sea bass, red porgy, tilefish, and snowy grouper; Gulf of Mexico red grouper, red snapper, and gray triggerfish; and Caribbean yellowfin grouper, yellowedge grouper, tilefish, mutton snapper, and yellowtail snapper. Maturity schedules, fecundity, and sex ratios are needed for commercially and recreationally important reef fish including black grouper, scamp, red hind, speckled hind, coney, graysby, warsaw grouper, silk snapper, queen snapper, other less dominant stocks, and management units for which data are lacking in the Caribbean.

c. Recruitment of reef fish and other fishery resources associated with reef environments.

(1) Source of recruitment in Gulf and South Atlantic waters, especially for snappers, groupers, amberjacks, and other reef fish.

(2) Annual estimation of the absolute of relative recruitment of juvenile

snapper, or grouper to estuarine and nearshore habitats. Development of recruitment indices for South Atlantic and Gulf of Mexico gag, greater amberjack, hogfish, and vermilion snapper; South Atlantic white grunt, black sea bass, red porgy, tilefish, and snowy grouper; Gulf of Mexico red grouper, red snapper, and gray triggerfish; and Caribbean yellowfin grouper, yellowedge grouper, tilefish, mutton snapper, and yellowtail snapper.

(3) The contribution of live-bottom habitat, proposed Marine Protected Areas in the South Atlantic, habitat areas of particular concern (HAPC) off Fort Pierce, Florida (*Oculina* bank), and off west central Florida (i.e., Florida Middle Grounds) to reef fish recruitment.

d. Stock structure of reef fish and other fishery resources associated with reef fish environments.

(1) Movement and migration patterns of commercially and recreationally valuable reef fishes, especially gag in the Gulf and South Atlantic and greater amberjack between the Gulf and South Atlantic.

(2) Examine retention and residency of reef fish species. Examine temporal and spatial differences in the size at age, size at maturity, etc.

(3) Genetic research on stock structure of red grouper in the Gulf of Mexico. Genetic research on gag from the Gulf and South Atlantic.

(4) Otolith microchemistry of gag from the South Atlantic to determine estuarine nursery habitat.

(5) Compare estimates of growth, maturity, and sex-transition for reef fish (i.e. gag, greater amberjack, hogfish, vermilion snapper, etc.) caught in the South Atlantic and Gulf of Mexico.

(6) Provide long-term continuous age structure information (especially in the South Atlantic) for species subject to frequent assessments including: South Atlantic and Gulf of Mexico gag, greater amberjack, hogfish, and vermilion snapper; South Atlantic white grunt, black sea bass, red porgy, tilefish, and snowy grouper; Gulf of Mexico red grouper, red snapper, and gray triggerfish; and Caribbean yellowfin grouper, yellowedge grouper, tilefish, mutton snapper, and yellowtail snapper.

(7) Develop models that integrate information from cohort strength, larval transport, and environmental information from an Integrated Coastal Ocean Observing System (IOOS) to explain variability recruitment of gag and other species.

(8) Coordinated tagging studies need to be conducted between researchers in the Gulf and South Atlantic to determine the magnitude of exchange of

gag and greater amberjack between the Gulf and South Atlantic.

2. Population assessment of reef fish and other fishery resources associated with reef environments:

   a. Determine age specific mortality and mortality rates especially for: South Atlantic and Gulf of Mexico gag, greater amberjack, hogfish, and vermilion snapper; South Atlantic white grunt, black sea bass, red porgy, tilefish, and snowy grouper; Gulf of Mexico red grouper, red snapper, and gray triggerfish; and Caribbean yellowfin grouper, yellowedge grouper, tilefish, mutton snapper, and yellowtail snapper.

   b. Description of habitat and fish populations in the deep reef community and the prey distributions supporting the community.

   c. Development of better indices of abundance that cover a broader spatial/seasonal scale for South Atlantic and Gulf of Mexico gag, greater amberjack, hogfish, and vermilion snapper; South Atlantic white grunt, black sea bass, red porgy, tilefish, and snowy grouper; and Gulf of Mexico red grouper, red snapper, and gray triggerfish.

   d. Stock assessments to establish the status of major recreational and commercial species or stock complexes. Innovative methods are needed for stock assessments of aggregate stocks, including the potential effect of fishing on genetic structure and the incorporation of sex change for protogynous species into stock assessment models.

3. Management of reef fish:

   a. Research in direct support of management, including catch and release estimate of mortalities by gear and depth. Species of interest include South Atlantic and Gulf of Mexico gag, greater amberjack, hogfish, and vermilion snapper; South Atlantic white grunt, black sea bass, red porgy, tilefish, and snowy grouper; Gulf of Mexico red grouper, red snapper, and gray triggerfish; and Caribbean yellowfin grouper, yellowedge grouper, tilefish, mutton snapper, and yellowtail snapper.

   b. Research on management measures that will reduce release mortality. Identify gear and tactics that can be used to return regulatory discards to depth in the recreational fishery to minimize or reverse pressure-related fishing trauma.

   c. Collect data on the magnitude and size/age composition of South Atlantic and Gulf of Mexico gag, greater amberjack, hogfish, and vermilion snapper; South Atlantic white grunt, black sea bass, red porgy, tilefish, and snowy grouper; Gulf of Mexico red grouper, red snapper, and gray triggerfish; and Caribbean yellowfin grouper, yellowedge grouper, tilefish, mutton snapper, and yellowtail snapper that are discarded by fishery and gear. Develop on-board

recording systems that will record information on discarded fishes in the commercial and recreational fishery including species, length, depth, location, and disposition (float, swim, etc.).

d. Identify ways to design, manage, and implement a U.S. Caribbean fishing permit specific to gear or fishery.

e. Collect, assemble, and computerize information on the commercial and recreational catches of yellowfin grouper, yellowedge grouper, tilefish, mutton snapper, yellowtail snapper, and other important species from the Caribbean. Topics should include a description of the fisheries including gear used, length and frequency of trips, area and habitat sampled, number of fishers, and depth fished.

f. Obtain data from the Gulf of Mexico catches of red grouper to improve the accuracy of stock assessments.

g. Develop pilot programs supporting management of reef fish including:

(1) Develop a pilot program for fisheries independent sampling of reef fish species, particularly grouper, tilefish, and red snapper.

(2) Develop a pilot program to quantify, by reef fish fishery, bycatch, catch composition, size frequency, etc.

(3) Develop appropriate statistical approaches for collecting recreational data useable for regional monitoring of recreational quotas.

C. Red Snapper Research

Red snapper are overfished and undergoing overfishing in the Gulf of Mexico and their status in the South Atlantic Bight is unknown. Assessments of these stocks are highly uncertain due to inadequate knowledge about some aspects to this species life history. Additionally, some aspects of the fishery such as shrimp trawl bycatch and regulatory discard mortality impede the ability of the stock to rebuild.

1. Red snapper bycatch: The bycatch of red snapper can have significant impacts from a fisheries management and ecological standpoint. Research on bycatch of red snapper should focus on the following:

a. Directed red snapper fisheries: The reef fish fishery is exploited by a variety of fishing gear and tactics. The following research on regulatory discards is needed to better evaluate the effectiveness of management measures such as minimum size limits and closed seasons:

b. Development and evaluation of gear, fishing tactics, and management measures to minimize the bycatch of or increase the survival of discarded red snapper and other

reef fish species.

c. Characterization and assessment of the impact of bycatch of undersized reef fish species, including release mortality, during recreational and commercial fishing. Research on the catch and release mortality of red snapper and other reef fish species, by gear (e.g., capture by commercial bandit rigs that are electrically or hydraulically powered), fishery (e.g., headboat, private boat, charter boat, commercial), and depth. Studies are needed to specifically relate "sink or swim" data, which can be obtained through observer programs, with long-term survival rates. More information is needed on release mortality and discard rate by depth, fish size, season and fishery.

d. Research to document predation rates on discarded red snapper and other reef fish species.

2. Red snapper population assessment:

a. Life history studies that cover the complete range of the species, including fecundity estimates by length and age. Fecundity samples are particularly needed from older red snapper.

b. Estimates of red snapper abundance indices covering a broad seasonal/spatial scale, age structure, age specific mortality rates, and recruitment indices.

c. Estimates of red snapper mortality rates through traditional methods or utilization of genetic tag methods.

d. Research (e.g., otolith analysis, tagging, etc.) to better describe stock structure and mixing rates between the eastern and western Gulf of Mexico. Research should include oceanographic data to determine whether transport from the Campeche Banks could be supplying important numbers of larvae to the western stock.

e. Review the value of the larval index given that many factors can mask the relationship of larvae to spawners.

f. Provide information on the effects on shrimp trawling on red snapper through community effects including nutrient cycling and changes in predation pressure.

g. Continue and expand the fishery-independent survey for adult red snapper.

h. Examine the age structure of red snapper taken from longlines (survey and fishery) and other gear, to clarify geographic distribution of fish as they age.

i. Conduct representative sampling of age- and length-composition consistently across area, time, and gear.

j. Research to clarify the magnitude and timing of density dependent compensation in juveniles by estimating survival at different densities of juvenile abundance.

3. Management of red snapper.

   a. Research to evaluate the use of minimum size limits as a management tool in the red snapper fishery.

   b. Research to estimate, independently of any stock assessment, changes in catchability by gear over time.

   c. Utilize simulation studies to identify and evaluate appropriate management strategies (including use of various reference points) and corresponding assessment modeling approaches for the fishery complex (shrimp, red snapper, vermilion snapper, etc.). Research could also test the hypothesis that red snapper production is enhanced in some way by increased shrimp trawling.

D. Coastal Migratory Pelagic Fisheries

The commercial and recreational demand for migratory coastal pelagics has led to overfishing for certain species. Additionally, some are transboundary with Mexico and other countries and may ultimately demand international management attention. High priorities include:

1. Recruitment indices for king and Spanish mackerel, cobia, dolphin, and wahoo, primarily from fishery-independent data sources.

2. Fishery-independent methods of assessing stock abundance of king and Spanish mackerel, dolphin, and wahoo.

3. Release mortality data for all coastal pelagic species. Age composition of commercial and recreational discards of king mackerel.

4. Improved catch statistics for all species in Mexican waters, with special emphasis on king mackerel, dolphin, and wahoo. This includes length-frequency and life history information.

5. Information on populations of coastal pelagics overwintering off the Gulf of Mexico and the South Atlantic states of North Carolina, South Carolina, Georgia, and Florida, especially concerning population size, age, and movement patterns; and for dolphin and wahoo during the entire year throughout their migratory patterns. Calculate the mixing rates for Atlantic/Gulf king mackerel on an annual basis and increase sampling intensity within the mixing zones with sample allocation that is representative of the fine scale distribution of the catch within the mixing zones. Continue evaluation of tag data, ongoing otolith microchemistry, otolith shape analysis studies, and microsatellite genetic marker data to improve estimation of stock structure and mixing proportions.

6. Development of a practical method for aging dolphin.

7. Basic biostatistics for Spanish mackerel, cobia, dolphin, and wahoo to develop age-

length keys and maturation schedules for stock assessments and to evaluate stock structures.

8. Impact of bag limits on total catch and landings of king and Spanish mackerel, dolphin, wahoo, and cobia.

9. Improved estimates of batch fecundity, spawning frequency, and age specific fecundity, including age and size at maturity, for king mackerel.

10. Evaluate spatial variability in size at maturity and fecundity at age among regions and migratory groups for king mackerel.

11. Determine age estimates for eastern Gulf king mackerel.

12. Evaluate the available sex ratio at size data to determine how sex ratios vary with size.

13. Obtain data from Mexican Gulf king mackerel catches.

14. Determine if king mackerel in the eastern and western Gulf of Mexico are separate stocks.

E. Gulf of Mexico Red Drum

Gulf of Mexico red drum are not experiencing overfishing but it is unknown if they are overfished. Most of the data for assessments comes from studies conducted by NMFS and state fishery management agencies. Specific research needs for red drum include:

1. Estimates of the absolute abundance of red drum from the Gulf of Mexico.

2. Age composition of adults in offshore waters.

3. Standardized stock assessment methodology that can accept state specific data within the context of a Gulf-wide stock assessment.

F. Essential Fish Habitat

Over the years, human activities have affected the quality and quantity of available habitat that is necessary to populations of recreationally and commercially important fish stocks. Data and information are needed to improve the identification and description of essential fish habitat (EFH). Current priorities for research in this are included:

1. Determine the effects of fishing gears (e.g., trawls and traps) and practices (e.g., gear retrieval and anchoring) on EFH, with emphasis on benthic habitats within the exclusive economic zone (EEZ) of the Caribbean, southern U.S. Atlantic, and Gulf of Mexico regions.

2. Develop scientific data to allow geographical EFH designations for the various life stages of Federally managed species.

3. Develop scientific data to allow the identification or refinement, as appropriate, of Habitat Areas of Particular Concern (HAPC) designation for the various life stages of Federally managed species.

4. Develop geographic information system (GIS) mapping protocols and tools to allow the presentation of EFH, HAPC, fishery distribution information, and other relevant data for the southeastern United States, including Puerto Rico and the U.S. Virgin Islands.

5. Characterize, using GIS, the spatial and temporal abundance and distribution of egg larval, and juvenile life stages of managed species from the SEAMAP data files.

6. Collect baseline data for proposed MPAs in the South Atlantic.

G. Economic and Sociocultural Studies

Social and economic assessments are required components of all fishery management plans and actions. These assessments support the accomplishment of management objectives while minimizing adverse social and economic impacts. Current priority research needs are:

1. Development of economic incentives and other innovative alternatives, including bycatch quotas, to gear and season/area restrictions as ways to reduce bycatch. The project should contrast the relative costs, potential gains, and level of bycatch reduction associated with traditional methods and any innovative alternatives addressed by the project.

2. Estimation of demand and supply models of for-hire trips. Studies using data from the Southeast economics add-ons to Marine Recreational Fisheries Statistics Survey charter captains telephone survey are highly encouraged. Evaluation of the headboat sector will require the collection of primary data from both anglers and vessel operators. Key species are red drum, king mackerel, Spanish mackerel, red grouper, gag, black grouper, dolphin, wahoo, vermilion snapper, yellowtail snapper, and Atlantic black sea bass. Fishing quality (stock size, catch per unit effort, average fish size) as a determinant of fishing demand should be emphasized. The models should be applicable to the evaluation of the economic impacts of common management tools, including, but not limited to, minimum and maximum size limits, bag limits, and seasonal closures. Motivational factors behind the selection of specific charter types, such as cost, trip duration (half day versus full day), time of day, size of the charter (number of passengers), services offered, etc., should be included as explanatory variables.

3. Design and evaluation of limited access options for all sectors of a specific fishery, including both the commercial and recreational sectors. Emphasis should be included, where appropriate, on different gears, modes of fishing, enforcement, and jurisdictional issues. Key species of emphasis are red snapper and grouper.

4. Estimation of fishing behavioral models, and effort supply and production functions for the commercial and for-hire sectors. Specific attention should be given to species target behavior, time and space decisions, and whether profit maximization is an appropriate motivational assumption for the supply of fishing effort. The intent of this research is to determine the basis upon which fishermen make their fishing related decisions (e.g., when to fish, where to fish, how much to fish, what species to target, what gear to use, etc.)

5. In-depth ethnographic profiles of communities in the Gulf of Mexico (all states) and South Atlantic (Ft. Pierce, Florida through North Carolina only). These include communities already identified as fishing communities and communities for which insufficient information exists to make status determination. Applicants should contact NOAA's National Marine Fisheries Service for appropriate prospective communities, based on the results of on-going investigations. Profiles should include descriptions of the community, commercial and recreational fishing-related activities and businesses, historical information on fishing related activities, community structure and social ties based on fishing, and changes in the community due to federal regulations on the fisheries.

6. Estimation of the non-market value of marine turtles, bottlenose dolphins, and right whales.

7. Examination of the costs and benefits of vessel and/or license buy-back programs. The analysis must include costs of the program and examination of alternative funding mechanisms. Key fisheries are red snapper, vermilion snapper, king mackerel, and shrimp (Gulf of Mexico and South Atlantic.

8. Evaluation of alternative effort control management measures in federally managed commercial fisheries. The evaluation should apply to a specific fishery. Key candidate species/fisheries are shrimp, and reef fish. Analyses should include a comparison of potential economic, social, cultural, and ecological impacts at the vessel, individual, and community level, and examine the desirability of single species versus multiple species approaches.

9. Evaluation of the transference of fishing opportunity between commercial, recreational, and conservation sectors under a transferable rights program. Key fisheries are the red snapper, grouper (collectively), and reef fish (collectively).

10. Evaluation of the allocation of harvests (TAC/quotas) among competing user groups. Key fisheries include individual species (red snapper, vermilion snapper, king mackerel, red grouper, and gag) and species groups (grouper). The analysis should quantify the economic value to each sector and identify the allocation that maximizes the economic benefit to the nation, subject to the biological constraints specified by the respective rebuilding plans, where appropriate. Evaluation of the commercial sector should include analysis by gear type and fishing location (western and northern Gulf, eastern Gulf, Keys), while that of the recreational sector should distinguish between charter, party boat, and private angler by fishing

location.

11. Develop an input-output model of the commercial marine fishing industry in Florida, by coast (east/Atlantic coast vs. west/Gulf coast), based on recommendations by NMFS economics staff. The project should include the development of seafood harvesting sectors in IMPLAN by area and gear type, and collection of basic data with which to implement the model.

12. Development of methodologies to accurately assess the cumulative economic and social impacts of fishery management regulations on fishermen and fishing communities.

13. Develop and estimate an economic general equilibrium model for one of the following fisheries: the Gulf of Mexico commercial reef fish fishery, the South Atlantic commercial snapper-grouper fishery, and the Gulf of Mexico and South Atlantic commercial coastal migratory pelagic fishery.

14. Develop a framework to define and estimate OY for any fishery, incorporating, as per SFA definition, social and economic components into the current biological definition of OY.

15. Estimate the potential economic rent for one of the following fisheries: the Gulf of Mexico commercial reef fish fishery, the South Atlantic commercial snapper-grouper fishery, the Gulf of Mexico and South Atlantic commercial coastal migratory pelagic fishery, and the Gulf of Mexico and South Atlantic commercial shrimp fishery.

II. Award Information

This document describes how you can apply for an award under the MARFIN Grant Program, and how we will determine which applications we will fund. We are soliciting applications for Federal assistance pursuant to 15 U.S.C. 713c-3(d). Proposals selected for funding through this solicitation will be implemented through a cooperative agreement.

NMFS will be substantially involved in planning, scheduling, conducting and analyzing proposed project activities through semi-annual reports and frequent contact with the grantee to help solve technical problems/situations as they arise during performance of the award.

Funding Availability: Approximately $2.4 million may be available in fiscal year (FY) 2007 for projects. This amount includes possible in-house projects. The NMFS Southeast Regional Office estimates awarding ten projects that will range from $35,000 to $300,000. The average award is $100,000. Publication of this notice does not obligate NMFS to award any specific grant or cooperative agreement or any of the available funds. Project proposals accepted for funding with a project period over one year do not have to compete for the additional years of funding. However, funding for the additional years is contingent upon the availability of funds and satisfactory performance and is at the sole discretion of the agency.

III. Eligibility Information

Eligible applicants include: Institutions of higher education, other nonprofits, commercial organizations, state, local and Indian tribal governments. Federal agencies or institutions are not eligible. Foreign governments, organizations under the jurisdiction of foreign governments, and international organizations are excluded for purposes of this solicitation since the objective of the MARFIN program is to optimize research and development benefits from U.S. marine fishery resources.

Cost Sharing: Cost-sharing is not required for the MARFIN program.

IV. Application and Submission Information

Address to Request Application Package: Application packages are available through grants.gov Apply. You can download the instructions and the application from the grant.gov website. NOAA forms 88-204 Project Summary and 88-205 Project Budget are accessible on the MARFIN homepage at http://sero.nmfs.noaa.gov/grants/marfin.htm and are to be attached as optional documents with the grants.gov submission.

For applicants without internet access, hard copies of applications may be requested from and completed application sent to: National Marine Fisheries Service, State/Federal Liaison Branch, 263 13th Avenue South, St. Petersburg, FL 33701.

Content and Form of Application Submission: Project applications must identify the principal participants, and include copies of any agreements describing the specific tasks to be performed by participants. Project applications should give a clear presentation of the proposed work, the methods for carrying out the project, its relevance to managing and enhancing the use of Gulf of Mexico and/or South Atlantic fishery resources, and cost estimates as they relate to specific aspects of the project. All applications must include funding for the principal investigator to participate in an annual MARFIN Conference in the southeast regional area at the completion of the project. Budgets must include a detailed breakdown, by category of expenditures, with appropriate justification for both the Federal and non-Federal shares.

Applications should exhibit familiarity with related work that is completed or ongoing. Proposals should state whether the research applies to the Gulf of Mexico, South Atlantic or North Atlantic for highly migratory species or multiple areas. Successful applicants are required to collect and manage data in accordance with standardized procedures and format approved or specified by NMFS and to participate with NMFS in specific cooperative activities that are determined by consultations between NMFS and successful applicants before project grants are awarded. All data collected as part of an awarded grant must be provided to the National Marine Fisheries Service.

Submission Dates and Times: Applications must be received on or before 5PM EDT on [July 12, 2006. Applications submitted through www.grants.gov will be accompanied by a date and time receipt indication on them. If an applicant does not have Internet access, hard copy proposals will be accepted and date recorded when they are received in the program office. Electronic or hard copies received after the deadline will not be considered and hard copy applications will be returned to the sender.

Intergovernmental Review: Applications under this program are subject to the provisions of Executive Order 12372, "Intergovernmental Review of Federal Programs."

Funding Restrictions: If the applicant does not have a negotiated indirect cost rate agreement with a Federal agency, then they may direct cost all charges, or submit a request to establish a rate. The Federal share of indirect costs proposed must not exceed 25 percent of the total direct costs identified on NOAA Form 88-205 Project Budget.

Construction is not an allowable activity under this program. Therefore, applications will not be accepted for construction projects.

Other Submission Requirements: Applications should be submitted through www.grants.gov. If an applicant does not have internet access, hard copies should be sent to:

National Marine Fisheries Service
State/Federal Liaison Branch
263 13th Avenue South
St. Petersburg, FL 33701

V. Application Review Information

When we receive applications we will screen them to ensure that they were received by the deadline date (see Dates); include SF 424 authenticated by an authorized representative; were submitted by an eligible applicant; address one of the funding priorities for federally managed species; and include a budget, statement of work, and milestones, and identify the principal investigator. We do not have to screen applications before the submission deadline in order to identify deficiencies that would cause your application to be rejected so that you would have an opportunity to correct them. However, should we do so and provide you information about deficiencies, or should you independently decide it is desirable to do so, you may correct any deficiencies in your application before the deadline. After the deadline, the application must remain as submitted; no changes can be made to it.

If your application does not conform to these requirements and the deadline for submission has passed, the application will be returned without further consideration.

Evaluation Criteria: Applications responsive to this solicitation will be evaluated by three or more appropriate private and/or public sector experts to determine their technical merit. These reviewers will provide individual evaluations of the proposals. No consensus advice will be given. These reviewers provide comments and assign scores to the applications based on the following criteria, with the weights shown in parentheses:

1. Importance/relevance and applicability of proposed projects to the program goals (35%): This criterion ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, Federal, regional, state, or local activities. For this competition, this includes: Does the proposal have a clearly stated goal(s) with associated objectives that meet the needs outlined in the project narrative? How effective are the proposed methods in enabling the principal investigators to maintain stewardship of the project performance, finances, cooperative

relationships, and reporting requirements?

2. Technical/scientific merit (40%): This criterion assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, and whether there are clear project goals and objectives. For this competition, this includes: Does the proposal clearly identify and describe, in the project outline and statement of work, scientific methodologies and analytical procedures that will adequately address project goals and objectives? Do the principal investigators provide a realistic timetable to enable full accomplishment of all aspects of the research?

3. Overall qualifications of applicants (15%): This criterion ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project. For this competition, this includes: Does the applicant possess the necessary education and identify the appropriate resources to complete the project?

4. Project costs (10%): This criterion evaluates the budget to determine if it is realistic and commensurate with the project needs and time frame. For this competition, this includes: Does the budget appropriately allocate and justify costs?

5. Outreach and education (0%): This criterion assesses whether the project provides a focused and effective education and outreach strategy regarding NOAA's mission to protect the Nation's natural resources. This criterion is not used by the MARFIN competition.

Review and Selection Process: Following the technical review, we will determine the weighted score for each individual review and average the individual technical review scores to determine the final technical score for each application. Then, we will rank applications in descending order by their average technical scores. The top twenty applications will be forwarded to a panel for further review. Those applications that are not in the top twenty category will be eliminated from further consideration.

MARFIN Panel: Those applications that meet the top twenty ranking will be presented to a panel of non-NOAA fishery experts known as the MARFIN panel. Each member of the MARFIN Panel individually considers: if needs of the Agency are addressed in each proposal; if the project assists industry; and if the project addresses issues that are important to regional fisheries management. Needs of the Agency follow the information identified in the Magnuson-Stevens Act, Title III, Sections 301 and 404. The individuals on the Panel provide comments and rate each of these proposals as either "Recommended for Funding" or "Not Recommended for Funding". The Panel will give no consensus advice. The Program Manager ranks the proposals in the order of preferred funding based on the number of Panel members recommending the proposal for funding. If there are ties in the rankings, those ties will be distinguished by the peer review score.

Selection Factors: The merit review ratings shall provide a rank order to the Selecting Official for final funding recommendations. The Selecting Official shall award in the rank order unless the proposal is justified to be selected out of rank order based on the following factors.

1. Availability of funding
2.. Balance/distribution of funds

a. geographically
b. by type of institutions
c. by type of partners
d. by research areas
e. by project types

3. Duplication of other projects funded or considered for funding by NOAA/federal agencies
4. Program priorities and policy factors
5. Applicant's prior award performance
6. Partnerships with/Participation of targeted groups
7. Adequacy of information necessary for NOAA staff to make a NEPA determination and draft necessary documentation before recommendations for funding are made to the Grants Officer.

The Selecting Official may negotiate the funding level of the proposal. The Selecting Official makes final recommendations for award to the Grants Officer who is authorized to obligate funds.

VI. Award Administration Information

Award Notices: Successful applications generally are recommended within 150 days from the date of publication of this notice. The earliest start date of awards average 90 days after each project is selected and after all NMFS/applicant negotiations of cooperative activities have been completed. The earliest start date of awards is about 180 days after the date of publication of this notice. Applicants should consider this selection and processing time in developing requested start dates for their applications. Unsuccessful applications will be returned to the applicant.

The exact amount of funds awarded, the final scope of activities, the project duration, and specific NMFS cooperative involvement with the activities of each project are determined in pre-award negotiations between the applicant, the NOAA Grants Office and the NMFS Program Office. Recipients must not initiate projects until a signed award is received from the NOAA Grants Office.

Administrative and National Policy Requirements: This notice contains collection-of-information requirements subject to the Paperwork Reduction Act. The use of Standard Forms is identified in the Department of Commerce Pre-Award Notification Requirements. This program uses NOAA forms 88-204 and 88-205, OMB approval No. 0648-0135. The public reporting burden for the collection of information is estimated to average one hour for an application, one hour for a semi-annual report, and one hour for a final report. These estimates include the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding these burden estimates or any other aspect of this collection of information, including suggestions for reducing this burden to Scot Plank (see Contact).

Notwithstanding any other provisions of law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information requirements subject to the Paperwork Reduction Act, unless that collection displays a currently valid OMB control number.

The Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements: The Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements contained in the Federal Register notice of December 30, 2004 (69 FR 78389) is applicable to this solicitation.

Limitation of Liability: In no event will NOAA or the Department of Commerce be responsible for proposal preparation costs if these programs fail to receive funding or are cancelled because of other agency priorities. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds.

National Environmental Policy Act (NEPA): NOAA must analyze the potential environmental impacts, as required by the National Environmental Policy Act, for applicant projects or proposals, which are seeking NOAA federal funding opportunities. Detailed information on NOAA compliance with NEPA can be found at the following NOAA NEPA website: (http://www.nepa.noaa.gov/), including our NOAA Administrative Order 216-6 for NEPA, (http://www.nepa.noaa.gov/NAO216_6_TOC.pdf), and the Council on Environmental Quality implementation regulations, (http://ceq.eh.doe.gov/nepa/regs/ceq/toc_ceq.htm).

Consequently, as part of an applicant's package, and under the description of their program activities, applicants are required to provide detailed information on the activities to be conducted, locations, sites, species and habitat to be affected, possible construction activities, and any environmental concerns that may exist (e.g., the use and disposal of hazardous or toxic chemicals, introduction of non-indigenous species, impacts to endangered and threatened species, aquaculture projects, and impacts to coral reef systems).

In addition to providing specific information that will serve as the basis for any required impact analyses, applicants may also be requested to assist NOAA in drafting of an environmental assessment, if NOAA determines an assessment is required. Applicants will also be required to cooperate with NOAA in identifying and implementing feasible measures to reduce or avoid any identified adverse environmental impacts of their proposal. The failure to do so shall be grounds for the denial of an application. In some cases if additional information is required after an application is selected, funds can be withheld by the Grants Officer under a special award condition requiring the recipient to submit additional environmental compliance information sufficient to enable NOAA to make an assessment on any impacts that a project may have on the environment.

Reporting: If you are selected to receive a grant award for a project you must:

- Submit semiannual project status reports on the use of funds and progress of the project to us within 30 days after the end of each six-month period. You will submit these reports to the

individual identified as the NMFS Program Officer in the funding agreement.

- Submit a final report within 90 days after completion of each project to the NMFS Program Officer. The final report must describe the project and include an evaluation of the work you performed and the results and benefits in sufficient detail to enable us to assess the success of the completed project.

- Submit all data collected as part of the project to the NMFS partner. Project data must be edited and verified as accurate by the applicant prior to being submitted to the NMFS.

- In addition to the final report, we request that you submit any publications printed with grant funds (such as manuals, surveys, etc.) to the NMFS Program Office for dissemination to the public.

We are committed to using available technology to achieve the timely and wide distribution of final reports to those who would benefit from this information. Therefore, you are encouraged to submit final reports in electronic format, in accordance with the award terms and conditions for publication on the MARFIN Home Page. You may charge the costs associated with preparing and transmitting your final reports in electronic format to the grant award. Reports may also be submitted in hard copy.

VII. Agency Contact

For questions regarding the application process, you may contact: Scot Plank, State/Federal Liaison Branch, (727) 824-5324, or Scot.Plank@noaa.gov.

VIII. Other Information

We will award grants or cooperative agreements for a maximum period of up to three years, consisting of one, two, or three budget periods. The award period depends upon the duration of funding requested in the application, the decision of the NMFS selecting official on the amount of funding, the results of post-selection negotiations between the applicant and NOAA officials, and pre-award review of the application by NOAA and DOC officials. Normally, each project budget period is 12 months in duration. The earliest start date of awards (1st of a month) is about 180 days after the date of publication of this notice.

You must also be available to respond to questions during the review and evaluation of the proposal(s).

We are strongly committed to broadening the participation of Historically Black Colleges and Universities, Hispanic Serving Institutions, and Tribal Colleges and Universities in its educational and research programs. Department of Commerce (DOC)/NOAA's goals are to achieve full participation by Minority Serving Institutions (MSI) in order to advance the development of human potential, to strengthen the nation's capacity to provide high-quality education, and to increase opportunities for MSIs to participate in and benefit from Federal

financial assistance programs. DOC/NOAA encourages all applicants to include meaningful participation of MSIs.

If you are selected to receive a grant award for a project, you must:

- Manage the day-to-day operations of the project, be responsible for the performance of all activities for which funds are granted, and be responsible for the satisfaction of all administrative and managerial conditions imposed by the award.

- Keep records sufficient to document any costs incurred under the award, and allow access to these records for audit and examination by the Secretary of Commerce, the Comptroller General of the United States, or their authorized representatives; and submit financial status reports (SF 269) to NOAA Grants in accordance with the award conditions.